FIGURE 2

Back to Back Sitting

Funding Nil **Clinical Trial** No **Subjects** Human **Ethics not Req'd** The study has conservative management.The treatment technique is not a surgical procedure and its not invasive technique. It does not have any risk to participants. **Helsinki** Yes **Informed Consent** Yes

127

www.ics.org/2021/abstract/127

PAIN PERCEPTION ASSESSMENT OF MICRONEEDLING TECHNIQUE IN WOMEN WITH FEMALE SEXUAL DYSFUNCTION

Gomes T[1], Ferreira I[1], Alves I[1], Pinto T[1], Piason L[1], Teles A[1], Queiroz A[1], Marianno A[1], Oliveira C[1], Barros D[1], Sodré D[1], Jorge D[1], Araújo E[1], Oliveira I[1], Maia J[1], Santana L[1], Zuza M[1], Caetano S[1], Robatto M[1], Negrão M[1], Pavie M[1], Amorim R[1], Matos R[1], Lordêlo P[1]

1. Patrícia Lordêlo´s Institute (IPL) - Pelvic Floor Care Center (CAAP) - Bahiana School of Medicine and Public Health

HYPOTHESIS / AIMS OF STUDY

The microneedling technique, commonly applied for body and facial's aesthetic dysfunctions, improves female self-image and self-esteem. In a case report, sexual behavior changes were seen after hyperpigmentation improvement and rejuvenation of the genital region due to microneedling in the intimate area (1,2). However, the precise indication for microneedling in the genital area it is not known. Despite the good acceptance with the facial or corporal microneedling, since it is a resource that uses micro needles on the tissue, it's unclear the level of acceptance of women regarding this technique applicability in the genital area. Innovatively, Thereby, in an effort to innovate this topic, this study aims to evaluate the pain perception due to genital area microneedling technique in women with female sexual dysfunction.

STUDY DESIGN, MATERIALS AND METHODS

This is a descriptive study. The population studied was women with sexual dysfunction and aesthetic complaints of flabby skin and genital hyperchromia.

The parameters used to consider women with sexual dysfunction were based on the values described by the Female Sexual Quotient questionnaire (FSQ). Higher scores indicate better sexual performance / satisfaction. From 82-100 points: good to excellent; 62-80 points: regular to good; 42-60 points: unfavorable to regular; 22-40 points: bad to unfavorable; 0-20 points: null to bad. The inclusion criteria was non-pregnant women between the ages of 18 and 65, with a sexual function graded as regular to good or less on the FSQ, without genital dermatoses on the area to be treated and/or local inflammatory condition, without complaints of infection, and who agreed to participate voluntarily in the research. Patients who use cosmetics in the genital region as well as anticoagulant medications were excluded.

The women were submitedd to basic anamnesis, FSQ application, physical evaluation, and photographic record, then, they received a treatment guidance manual. Thereafter, they were randomized into two groups according to needle length: 0.5mm and 1.0mm, both from Derma Erase. All women underwent a microneedling session, following the protocol described in the literature as 20 applications to the skin with the roller in four movement directions: horizontally, vertically, diagonally righwards and leftwards. Immediately after the technique, a subjective pain assessment related to the micro-needling technique was performed by questioning the participant using a three-point scale: "How was your sensitivity to pain in relation to the treatment?". The possible answers on the three-point scale were: 1) painless, 2) bearable pain, 3) unbearable pain. Subsequently, the Visual Numerical Scale (VNS) was used, being the value 0 considered by the VNS as a painless technique and the value 10, the worst possible pain. The reported pain of microneedling was compared to the usual hair removal techniques. The patient was asked what type of hair removal she used to do (shaving, waxing or laser) and, for comparison, the participants were asked which procedure she considered to be the most painful or if the level of pain was similar. Patients who underwent razor shaving were excluded from this analysis. Finally, the patients answered in which location intimate microneedling

was most painful and/or uncomfortable: mons pubis, labia majora, labia minora, perineum, and inner thigh. This research was approved by the Research Ethics Committee and all participants signed the Informed Consent Form.

RESULTS

The testing sample comprised 11 women whose 9 related the microneedling as a bearable pain procedure and the other 2 as a painless technique. The VNS assessment showed that the 0,5mm neddle had a 2,0 ± 1,4 mean level of pain and the 1,0mm had a 3,0 ± 1,6 mean level of pain.

Only 7 women had the hair removal habit using wax or laser. 5 of those related that hair removal is more painfull than the microneedling procedure. The other two patients considered that hair removal and microneedling have similar painful sensitivity. The patients related that the most pain sensibility due to microneedling was in the mons pubis, whereas there was no report of pain sensibility in the labia minora region.

INTERPRETATION OF RESULTS

The application of a microneedling aesthetic procedure in women who have sexual disfunction showed that the technique has a low pain threshold associated, since the majority of patients considered the procedure as a beareable pain and the mean level of pain measured by the VNS was 2 and 3 for the 0,5mm and 1,0mm needles, respectively. Another fator that can contribute for the technique be tolerable and appliable in the intimate region is that the microneedling showed itself more confortable than genital hair removal by the majority of patients assessed. With regard to the most pain sensitive region for the applicability of microneedling, it is believed that the mons pubis region is the most sensitive due to the pressure employed by the roller on the bony protuberance.

Since the genital region appearence influences the sexual function3, it is ought to assess the pain sensibility related to microneedling as a procedure to be indicated for aesthetic treatment in the genital region, principally if applicable in patients whose pain is a sexual disfunction fator. In this presente study, since FSQ was used as inclusion criteria for sexual disfunction, it was not possible to distinguish between the types of sexual disfunctions, but this issue should be assessed more carefully in future studies.

CONCLUDING MESSAGE

The microneedling technique in the genital region may be one more therapeutic possibility for patients who present a sexual dysfunction related to an aesthetic complaint of the genital region.

A técnica de microagulhamento em região genital pode ser mais uma possibilidade terapêutica para pacientes que apresentam uma disfunção sexual relacionada a uma queixa estética de região genital.

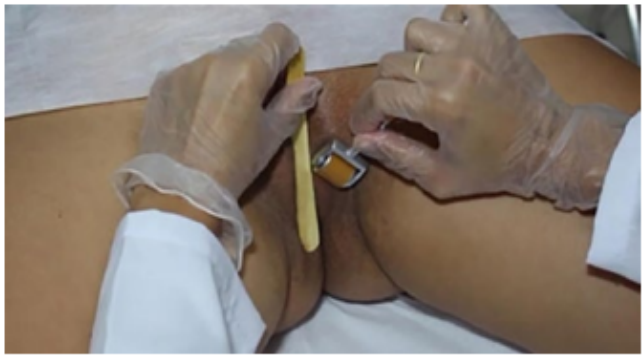
FIGURE 1

Painful perception: needle 0,5mm				Painful percepction: needle 1,0mm			
Patient	Three-point scale	VNS (0-10)	Type of hair removal / Greatest pain	Patient	Three-point scale	VNS (0-10)	Type of hair removal / Greatest pain
ALPRS	Painless	0	Wax / Waxing	MMC	Painless	0	Razor/ Not applicable
PMG	Bearable pain	2	Wax / Same pain	LMSG	Bearable pain	2	Razor/ Not applicable
MS	Bearable pain	3	Razor/ Not applicable	LSM	Bearable pain	3	Wax / Waxing
VTC	Bearable pain	3	Laser / Same pain	VSO	Bearable pain	3	Laser / Waxing
				CRJS	Bearable pain	4	Laser / Waxing
				BBSS	Bearable pain	4	Wax / Waxing
				PT	Bearable pain	5	Razor / Not applicable
		M±SD: 2±1.4				M±SD: 3±1.6	

three-point scale: painless, bearable pain, unbearable pain; VNS= Visual Numerical Scale. M= media. SD= Standard deviation;.

Description of pain perception by women with sexual dysfunction after immediate application of microneedling in the genital region.

FIGURE 2



Application of the microneedling technique in the female genital region.

REFERENCES

1. Gomes T, Baqueiro P, Oliveira C, et al. Microneedling on the external female genitalia's flaccidity in patients with Ehlers-Danlos: Case report. J Cosmet Dermatol. 2019;1-6.
2. Wilkie G and Bartz D. Vaginal Rejuvenation: A Review of Female Genital Cosmetic Surgery. Obstet Gynecol Surv. 2018; 73 (5): 287-292
3. Gomes T, Brasil C, Barreto A, et al. Female genital image: is there a relationship whith body image? Turk J Obstet Gynecol. 2019;16:84-90.

Funding No **Clinical Trial** No **Subjects** Human **Ethics Committee** Bahiana School of Medicine and Public Health **Helsinki** Yes **Informed Consent** Yes